Supersedes Suppl. Spec. dated 3/5/99, 11/5/99 & 3/28/00

SUPPLEMENTAL SPECIFICATION

AMENDMENT TO SECTION 632 -- RETROREFLECTIVE PAVEMENT MARKINGS

Amend 2.1 to read:

2.1 Traffic Paint shall be ready-mixed white or yellow paint which may be used as a base for drop-on reflecting glass beads, or for use as a plain non-reflective traffic paint suitable for either bituminous or concrete surfaces. White or yellow traffic paint shall meet the requirements of the current Department of Transportation specifications for White or Yellow Traffic Paint as specified in section 708. Department specifications are also available from the Bureau of Traffic.

Add to 2.1:

2.1.1 Traffic paint shall be prequalified for use. To prequalify a product, manufacturers shall supply a sample from each lot manufactured to the Bureau of Materials & Research for verification testing. Acceptable lots will be included on the Traffic Paint Batch List available at and maintained by the Bureau of Materials and Research. Final acceptance will be subject to testing of materials sampled at the project. Each batch of paint delivered to the project shall be accompanied by a document issued by the supplier identifying the manufacturer, product, batch number and date of manufacture. Field sampling will be performed in accordance with NHDOT Test Procedure C1.

Amend 2.2 to read:

2.2 Glass beads shall be water white conforming to AASHTO M 247 and shall be Type 1 with a moisture resistant coating.

Amend 3.1.1.1 to read:

3.1.1.1 The Contractor shall establish the base line points at 20 m (50 ft) intervals on curves and 40 m (100 ft) intervals on tangent sections throughout the length of pavement to be marked under this section from the Department provided control points. All other pavement markings shall be applied according to the physical pavement layout provided. The Contractor shall provide the layout scheme to the Engineer at least one week prior to layout of the permanent pavement markings.

<u>Amend</u> 3.1.1.2 to read:

3.1.1.2 Whenever existing pavement marking patterns are to be obscured and later restored, the Contractor shall take detailed measurements of all existing pavement markings to permit the Contractor to accurately prepare drawings to reproduce those patterns. Reproduced markings

shall be placed in the correct location laterally to reflect the intended lane and shoulder widths as specified in the Contract or as directed. The Contractor shall also perform a good quality videotape survey showing all pavement markings in each direction of travel with appropriate audio description of location and direction. The drawings and videotape shall be submitted to the Engineer prior to obscuring any pavement markings on the project.

Add to 3.1.1:

- **3.1.1.3** The Contract Administrator shall be notified of the day and time of the pavement markings application a minimum of 48 hours prior to the application unless otherwise approved. This notification must be acknowledged. No payment will be made for materials placed without proper notification.
- **3.1.1.4** In the event the Contractor cannot place pavement markings meeting full MUTCD standards on a traveled roadway within or immediately following the three-day interim period, the Bureau of Traffic shall be notified a minimum of 48 hours before the end of the interim period in order to apply applicable pavement markings. No item payment will be made and a callout charge of \$2,500.00 plus \$500.00 per mile of striping for this application will be deducted from moneys due the Contractor. In case of cancellation or the Contractor placing the pavement markings after notification, the callout charge will apply unless the Bureau of Traffic is notified by telephone at least 24 hours prior to the event.

Add to 3.1:

3.1.7 The Contractor shall furnish and have available for the Engineer's use a pavement temperature gauge.

Amend 3.2.1 to read:

3.2.1 All equipment used for highway striping shall be specifically designed and manufactured for that purpose by a company experienced in the design and manufacture of such equipment and approved for use. Equipment used for longitudinal lines shall be mounted on a truck having a minimum gross vehicle weight rating of 6350 kg (14,000 lb) with a minimum paint tank capacity of 225 L (60 gal), and shall have the capability of placing double lines up to 100 mm (4 in) in width or single lines up to 300 mm (12 in) in width in one pass. Each paint tank shall have metal plate or plates attached in a prominent place, plainly marked with the maximum filled capacity of the tank. Each tank shall have a mixer capable of combining and maintaining the ingredients of the paint into a thoroughly mixed and uniform mass. The paint shall be applied with an atomizing or airless spray type striping machine having the waterbase paint at a temperature of 40 °C (105 °F) maximum in the heat exchanger and 20 - 35 °C (70 -100 °F) at the spray nozzle. Paint shall pass through a screen with a maximum opening of 3.175 mm (1/8 of an inch) located before the heat exchanger. A valve accessable for sampling shall be located in the paint feed line between the screen and the heat exchanger. The striping machine shall be equipped with an automatic paint stripe controller having skip-line capability to place broken lines in accordance with 3.1.3. A gauge reading paint temperature shall be mounted

and conveniently displayed on the equipment. The equipment shall include a mechanical, glass-bead dispenser mounted not more than 300 mm (12 in) behind the paint dispenser. All equipment shall be kept in good operating condition.

Add to 3.2.1:

3.2.1.1 Vehicles and equipment will be subject to inspection by the Bureau of Traffic at their office located in Concord at least once per year prior to the first application of material and as frequently as considered necessary thereafter. Yearly inspection shall be arranged with a ten working day notification. Approved vehicles will receive a seal for that year. If found unfit to function properly, the vehicle will be disapproved for use until correct operating conditions have been obtained.

Add to 3.2.3:

3.2.3.1 Every effort shall be made to apply paint according to the requirements stated in this section. When paint must be applied between the dates of October 15 through April 15 inclusive or on pavement with a surface temperature below 5 °C (40 °F), cold weather alternatives shall be used. Refer to the Traffic Paint Batch List for the permitted retroreflective paints or the Approved Products List for the permitted removable preformed retroreflective tapes. These products shall be applied according to the manufacturer's requirements. Prior to October 15, cold weather retroreflective paint pavement marking materials may be used if the pavement marking contractor has changed over to cold weather retroreflective paint pavement marking material. After April 15, the pavement marking contractor may use up the existing remaining supply of cold weather retroreflective paint pavement marking material in stock.

Amend the second sentence of 3.2.5 to read:

Glass beads shall be applied simultaneously with paint, by pressurized or mechanical drop methods.

Add to 5.1:

- **5.1.1** Cold weather retroreflective paint pavement marking lines of the type and width specified will be paid for under the applicable 632.01_ _ Retroreflective Paint item at 1.25 times the measured length at the contract unit price when the pavement surface temperature is below 5 °C (40 °F) or between the dates of October 15 through April 15 inclusive provided that a contract extension had been granted in accordance with 108.07, or as agreed to by the Engineer.
- **5.1.2** If preformed retroreflective tape, removable is ordered it will be paid for as extra work on a force account basis in accordance with 109.04(D).